

FOR THE RECORD

A. H. Çakir,¹ Ph.D.; L. Açıık,² Ph.D.; and T. Kesici,³ Ph.D.

Allele Frequency Distribution for Six STR Loci in Turkish Population

POPULATION: Turkish

KEYWORDS: forensic science, DNA typing, population genetics, short tandem repeats, polymerase chain reaction, CSF1PO, F13AO1, FESFPS, D16S539, D7S820, D13S317, Turkey

The samples were collected from unrelated individuals randomly selected from criminal cases. The DNA was extracted from fresh blood leucocytes, bloodstains, tissues, and single hairs by Chelex 100 method (1).

DNA samples (1 to 2 ng) were amplified using reagents provided in GenePrint™ STR System kit (Promega, Madison, WI)

¹ Ministry of Interior, Gendarmerie General Command, Criminal Department, Biology Division, Ankara, Turkey

² Gazi Üniversitesi, Fea Edebiyat Fakültesi, Biyoloji Boleman, Ankara, Turkey

³ Ankara University, Faculty of Agriculture, Biometri-Genetic Unit, Ankara, Turkey

according to the technical manual (Part# TMD004), PCR amplifications were carried out in a Perkin-Elmer 9700. The amplified products were separated in denaturing polyacrylamide gels according to the technical manual and visualized by silver staining (2).

Data were analyzed by using homozygosity test (3), exact test (4) and the Promega Software, POWERSTATS.

The dataset can be accessed at <http://www.gazi.edu.tr/~leyacik>

References

1. Walsh PS, Metzger DA, Higuchi R. Chelex 100 as a medium for simple extraction of DNA for PCR-based typing from forensic materials. *BioTechniques* 1991;110:506-13.
2. Bassam BJ, Caetano-Anolles G, Gresshoff PM. Fast and sensitive silver staining of DNA in polyacrylamide gels. *Analytical Biochemistry* 1991;196:80-3.
3. Weir BS. Population genetics in the forensic DNA debate. *Proc Natl Acad Sci* 1992;89:1654-9.
4. Guo SW, Thompson EA. Performing the exact test of Hardy-Weinberg proportion for multiple alleles. *Biometrics* 1992;48:361-72.

Allele	CSF1PO	F13AO1	FESFPS	D16S539	D7S820	D13S317
4		0.149				
5		0.221				
6		0.297				
7		0.264	0.010		0.025	0.001
8	0.002	0.025	0.008	0.041	0.168	0.144
9	0.035	0.002	0.003	0.157	0.109	0.080
10	0.282	0.002	0.229	0.091	0.263	0.095
11	0.293	0.002	0.419	0.299	0.254	0.276
12	0.301	0.005	0.266	0.257	0.141	0.289
13	0.079	0.005	0.063	0.136	0.039	0.091
14	0.006	0.008	0.002	0.019	0.001	0.023
15	0.002	0.017				0.001
16		0.003				
N	463	296	303	479	479	479
P	0.393	0.118	0.075	0.394	0.087	0.087
H	0.695	0.750	0.700	0.781	0.756	0.854
PD	0.886	0.910	0.854	0.925	0.934	0.919
PEP	0.421	0.510	0.428	0.564	0.520	0.702
PIC	0.69	0.73	0.64	0.76	0.78	0.77

N: number of individuals typed, P: exact test, H: observed heterozygosity, PD: power of discrimination, PEP: excluding probability of paternity, PIC: polymorphism information content.